

WHAT IS CLAIMED IS:

1. A portable telephone terminal having a load portion, whose power consumption varies according to status of operation of the portable telephone terminal, said portable telephone terminal comprising:

a first power supply circuit;

a second power supply circuit;

a determining circuit for determining said status of operation of the portable telephone terminal; and

a control circuit for effecting control according to said determined status of operation to switch between a first power supply mode in which said first power supply circuit supplies power to said load portion and a second power supply mode in which said second power supply circuit supplies power to said load portion.

2. A portable telephone terminal as claimed in claim 1,

wherein said control circuit stops power supply from said first power supply circuit when a specified time has passed after starting said second power supply circuit.

3. A portable telephone terminal as claimed in claim 1,

wherein said control circuit starts said second

power supply circuit and stops power supply from said first power supply circuit simultaneously.

4. A portable telephone terminal as claimed in claim 1,

wherein said status of operation includes at least a call state and a wait state; and

switching to said second power supply mode is performed when the portable telephone terminal is in said call state, and switching to said first power supply mode is performed when the portable telephone terminal is in said wait state.

5. A portable telephone terminal as claimed in claim 4,

wherein switching to said first power supply mode is performed only in a time period other than a time period of the portable telephone terminal being in a state of monitoring received radio waves within a period of said wait state and switching to said second power supply mode is performed in the other time period.

6. A portable telephone terminal as claimed in claim 1,

wherein said first power supply circuit is a series power supply for converting a direct-current input to a direct-current output having a voltage different from

that of the direct-current input; and

    said second power supply circuit is a self-excited or externally excited converter for converting a direct-current input to a direct-current output having a voltage different from that of the direct-current input.

7. A power supply method for a portable telephone terminal, said portable telephone terminal having a first power supply circuit, a second power supply circuit, and a load portion whose power consumption varies according to status of operation of the portable telephone terminal, said power supply method comprising the steps of:

    determining said status of operation; and  
    switching, according to said determined status of operation, between a first power supply mode in which said first power supply circuit supplies power to said load portion and a second power supply mode in which said second power supply circuit supplies power to said load portion.

8. A power supply method as claimed in claim 7, wherein said switching step includes the steps of:  
    starting said second power supply circuit;  
    counting passage of a specified time after said starting of said second power supply circuit; and  
    stopping power supply from said first power supply

circuit after said counting is finished.

9. A power supply method as claimed in claim 7,  
wherein said switching step starts said second  
power supply circuit and stops power supply from said  
first power supply circuit simultaneously.

10. A power supply method as claimed in claim 7,  
wherein switching to said second power supply mode  
is performed when said portable telephone terminal is in  
a call state, and switching to said first power supply  
mode is performed when said portable telephone terminal  
is in a wait state.

11. A power supply method as claimed in claim 10,  
wherein switching to said first power supply mode  
is performed only in a time period other than a time  
period of said portable telephone terminal being in a  
state of monitoring received radio waves within a period  
of said wait state and switching to said second power  
supply mode is performed in the other time period.